

DETAILED ACTION

In view of the appeal brief filed on October 7, 2010, PROSECUTION IS HEREBY REOPENED. Rejections are set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below: /Duane Smith/

Supervisory Patent Examiner

Art Unit 1776

Specification

It is requested that Applicant amend his specification to include reference to equivalent U.S. Patents, or other English language documents if known, where non-English patents/documents are referenced.

Election/Restrictions

CTRS 04/06/2007

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

<i>Species</i>	<i>Corresponding Drawing Figures</i>
1	2, 2a & 2b
2	3 & 3a
3	4 & 4a

Applicant's **Election** without traverse is again acknowledged:

Applicant again provisionally elects species 2 (Figs. 3 and 3a).

Claims 8, 9, 12-15, 18 and 19 are generic to all three species. Claims 10 and 16 read on the elected species, as well as species 3 (Figs. 4 and 4a). Claims 11 and 17 read on the elected species. Thus, all pending claims read on the elected species.

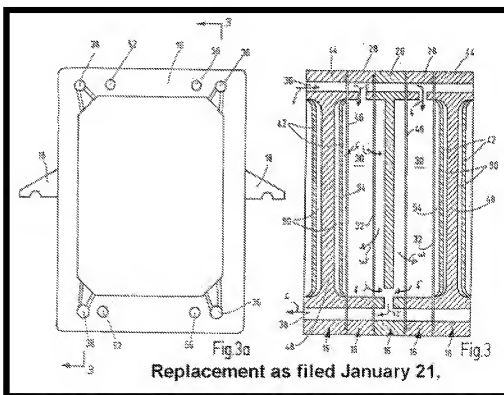
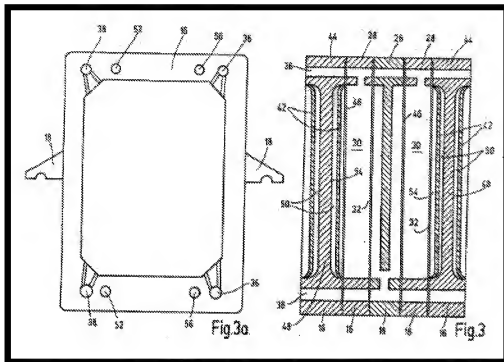
Prompt and favorable action is solicited.

Respectfully submitted,

Dated: August 28, 2007

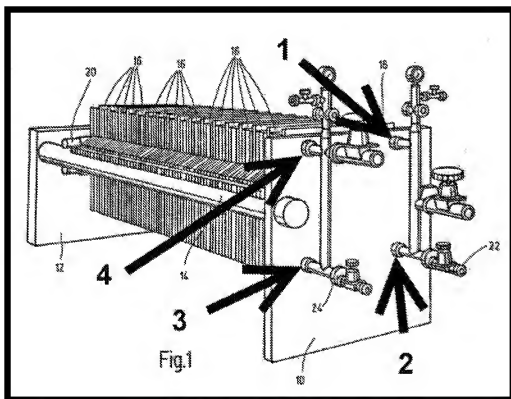

Mark S. Bieks
Reg. No. 28,770

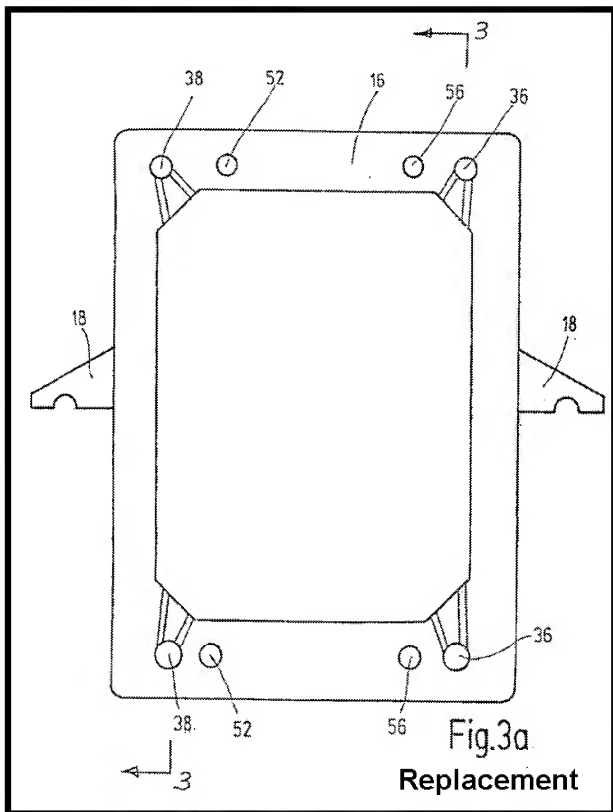
Elected Species



Claims **8-21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant has failed to teach those skilled in the art how fluid communication between the **FOUR** unlabeled ports (see annotated Figure 1 below) in “**mounting plate**” **10** and the **EIGHT** orifices/ports (**38, 52, 56** and **36** in the top; **38, 52, 56** and **36** in the bottom) in the **frame 16** of **Figure 3a** takes place.





During a **telephone interview** conducted on **December 2, 2010**, **Mr. Bicks** expressed the belief that one of ordinary skill in the art would know that the ports 38 and 40 (referencing ***non-elected*** Figure 2a by way of example), both being outlets or outputs, would somehow be connected. The undersigned disagreed with **Mr. Bicks** then, and continues to do so. **Mr. Bicks'** opinion was unsupported by any evidence whatsoever that would tend to prove his naked allegation – see **MPEP §§ 716.01(c) II** and **2145 I**.

As depicted in **Figure 1**, **frame 16** is pressed against **"mounting plate" 10**. It is unclear from the disclosure (including and considering those supplemental portions that were added years after the initial filing) how the **EIGHT** ports/orifices of frame 16 of **Figure 3A** fluidically communicate with the **FOUR** unlabeled ports/orifices of **"mounting plate" 10** as depicted in Figure 1. The disclosure (including and considering those supplemental portions that were added years after the initial filing) fails to teach how these ports/orifices communicate with each other. For this specific technical reason, one skilled in the art would be unable practice the invention without undue experimentation.

Additionally, in each of **Figures 2a, 3a** and **4a**, it is unclear which of the various **"frame parts 16"** (or **"sets?"**) is being depicted.

Additionally, it is unclear how pressure spaces 52 and pressure spaces 50 communicate with other volumes or spaces within the system. Applicant points to non-elected **Figure 4a** in his brief, asserting:

Specifically, one skilled in this art would readily recognize that pressure spaces 50 are connected to pressure channels 50 by connecting passages as shown, for example, in Fig. 4a. These connecting passages structurally correspond to those connecting passages provided for input channels 36 and output channels 38, 40 to connect channels 36, 38, 40 to spaces 30. Since the connections to spaces 30 are admittedly adequately disclosed, the connections of spaces 50 to channels 52 are also adequately disclosed to enable one skilled in the art to make and use the claimed invention.

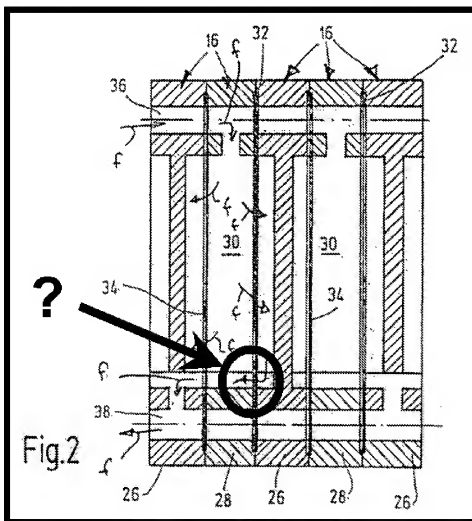
Appeal Brief of October 7, 2010 - Page 5

It is unclear why the same “connecting passages” do not appear in Figure 3a. Does the depiction in **Figure 3a** present a different construction, or an erroneous one, when compared to **Figure 4a**? But this reference to **Figure 4a** brings out another point of confusion. If, as shown in **Figure 4a**, the “output channels” 38 and 40, the “input channel” 36, and the “pressure channel” 52 all communicate with the same volume as depicted in **Figure 4a**, then, how is filtration accomplished? What forces the unfiltered material through the filter media? Why would the unfiltered material not immediately go from the “input channel” 36 to the “output channels” 38 and 40 without passing through any filter?

Applicant's **Figure 3** et al. depict **filter cloth 46** extending across "**input channel**" **36**, and "**filtrate channel**" **38** at numerous locations (see Replacement Fig. 3 above which has been annotated by the undersigned with eight small circles encircling the areas having filter cloth which are in question). The passage of "**unfiltered material**" across the first encountered section of "**input channel**" **36** would appear to immediately cause that section of filter cloth to blind, or become blocked, given that it is so small in cross-sectional area and would be subject to immediate, enormous accumulation. It is unclear how other sections of filter cloth 46 would see, or be the recipient of any "**unfiltered material.**" Based on the instant disclosure, one skilled in the art would not know what structure enables the flows depicted by arrows "**f.**" It is unclear why the filter cloth is at any of the encircled locations. The disclosure (including and considering those supplemental portions that were added years after the initial filing) fails to teach why filter cloth is at the locations encircled in **Figure 3** above. For this specific technical reason, one skilled in the art would be unable practice the invention without undue experimentation.

It is unclear how or where washing fluid "**w**" flows through the elected species. Looking to the replacement drawings submitted on **January 21, 2010**, where labels "**w**" have been added to aid in the understanding of the invention by depicting the "**washing flow**" (Remarks of January 21, 2010; Page 8; lines 8-10), it remains unclear how the wash fluid communicates with the claimed "**output,**" as the arrowhead associated with each added "**w**" ends in a chamber with no apparent outlets at all. Moreover, it is unclear how the "**washing flow**" emanates from a chamber depicting no inlets.

Although non-elected, the filtering flow of the type **apparently** depicted in Replacement Fig. 2 (see immediately below) must be addressed, since it has been so often argued and referred to while **"prosecuting"** the elected species. According to the filtering flow arrows "f," after entering chamber 30 through an unlabeled passage, the flow splits, going across laminar filter 34 and alternately across laminar filter 32 into an unlabeled chamber depicting no outlets, and thereafter, passing back across laminar filter 32 again in a lower portion of chamber 30, and then across laminar filter 34 before exiting through yet another unlabeled passage in fluid communication with 38.



Given the instant disclosure, one skilled in the art would not know across, and then back across the same filter 32, takes place, as the structure/means to facilitate such flow has not been clearly depicted or described. No such flow takes place in the elected species depicted in Fig. 3.

For the sake of conciseness and brevity, all of the rejections appearing hereafter, under the second paragraph of 35 USC 112, that would support an enablement rejection under the first paragraph that has not already been set forth, are incorporated herein by reference, as if set forth in full

And finally, with respect to **enablement**, the specification closes with the following sentence:

To the extent filtrate spaces are discussed in the application, they are partially also designated as "unfiltered material space" in technical language so that the terms correspond to each other and can be equated to each other in this respect.

A **"filtrate"** refers to a fluid that has passed through a filter, as those skilled in the art would know. A **"prefilt"** or **"unfiltered material"** refers to a fluid that has not yet passed through the filter, as those skilled in the art would know. To attempt to equate **"filtrate"** and **"unfiltered material"** will only serve to confuse one skilled in the art. The recitations **"filtrate"** and **"unfiltered material"** are mutually exclusive.

Claims **8-21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the **written description** requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 8, contains the recitation:

feeding a washing fluid sequentially through each set of the second filter mediums, the filter cakes and the laminar filters in that order such that in each set the washing fluid flows first through one second filter medium, then through one filter cake and then through one first laminar filter; and

and claim 14, contains the recitation:

channel means for conveying a washing fluid sequentially through each set of said second filter mediums, said filtrate spaces and said first laminar filters in that order, and out said output, such that in each set the washing fluid flows first through one filter medium, then through one filter cake and then through one first laminar filter before flowing to said output.

Neither of these recitations enjoys support in the originally filed specification. For some reason, Applicant has repeatedly referred to non-elected species 1 (Figs. 2, 2a and 2b) in an attempt to explain operation of the elected species.

Specifically, Applicant has asserted:

The newly submitted drawings add arrows “f” and “w” to show the filtering flow and the washing flow, respectively, as clearly described in the paragraph spanning pages 8-9 of the substitute specification and on page 9 of the originally filed specification. The additions of these arrows are fully supported by the present application, particularly since the original application would be interpreted in this manner by one skilled in this art.

REM (08/17/2009)

In the Specification

Amend the paragraph of the substitute specification spanning pages 8-9 as follows:

In the embodiment shown in FIG. 2, the unfiltered material is supplied via input channels 36 to the individual frame parts 16 forming sets of filtrate plates 26 and filter frames 28 in the stack sequence (compare also FIG. 2a). The respective unfiltered material flows (as shown by arrows f) through the input channels 36 into the filtrate space 30, and there passes through the laminar filter 32 and the laminar filter 34 on both sides. The filtrate is then drained via output channels 38, 40 which are mounted in succession in the horizontal plane. The other output channel 40 shown in FIG. 2b is in another section plane from output channel 38 in FIG. 2. As shown in FIG. 2a, the configuration of output channels 38, 40 is doubled, specifically extending at the top and bottom on the frame parts 16 and extending essentially in a horizontal plane to the input channels 36 for the unfiltered material. If at this point the filter cake has built up sufficiently in the respective filtrate space 30, it still has corresponding contents which have not been filtered out. In order to recover these substances, the filter cake in the filtrate space 30 is washed out. For this purpose, a washing liquid, which is not detailed, is supplied on the input side via the filter output channel 38. After passing through the filtrate plates 26, the filter medium 34, the filtrate cake in the filtrate space 30 and the laminar filter 32 (as shown by arrows w), the washing liquid with the active substances obtained by washing travels into the filtrate plate part 26, which is the middle one as viewed in FIG. 2, and from there drains via output channel 40. In this process, the specific configuration permits careful washing of the filter cake uniformly over the surface. Furthermore, with this configuration, the active substances can be obtained especially carefully without other pressurized media. For extremely fine substances which react sensitively to mechanical loading, the configuration of the filter package as shown in FIG. 2 is recommended.

**From REM (08/17/2009);
Thicker underlining added by Examiner;
Laminar filter "34" is not depicted in Figs. corresponding
to the elected species.**

It is unclear why Applicant continually resorts to the figures corresponding to non-elected species when description of the elected species exists

Next the filter cake in the filtrate space 30 in the pressed state is washed, the washing liquid being supplied to the device by way of the other two channels 56 (compare FIG. 3a) for this purpose. This washing liquid is then distributed by way of the free space or the washing chamber 54 between the respective pressing membrane 42 and the filter cloth 45 as another filter medium and is pressed in an equal area through the filter cake in the filtrate space 30. Then the washing liquid passing through the deep-bed filter layer in the form of a laminar filter 32, is collected in the filtrate plate 26 and then drained by way of the filtrate channels 36.

Yet, this description appears to differ with the washing flow arrows “w” that were drawn in replacement **Fig. 3**, corresponding to the **elected** species?

In claim 21, use of the closed recitation “**consisting of**” is not supported by the originally filed specification. The language “**consisting of**” does not appear anywhere in the originally filed specification.

Claims 14-19 are rejected under 35 U.S.C. 112, **first paragraph**, because the specification, while being enabling for channel means comprising channels extending through said frame parts, it does not reasonably provide enablement for any other interpretation of “**channel means**.” By definition, a dependent claim must further limit a claim from which it depends. The doctrine of claim differentiation requires that two claims not have the same meaning. Thus, the language of claim 19 dictates that the recitation “**channel means**” be interpreted as something other than “**channels extending through said frame parts**.” The originally filed specification provides no

basis for any other possible interpretation of the recitation “**channel means.**” The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or practice the invention with anything other than “**channels extending through said frame parts.**”

Claims **8-21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent **claim 8** specifies “**conveying the washing fluid from the laminar filters to the output.**” It is unclear how this is accomplished. It is unclear if Applicant intends: **–conveying the washing fluid that has passed through the laminar filters to the output–?** Independent **claim 14** specifies:

channel means for conveying a washing fluid sequentially through each set of said second filter mediums, said filtrate spaces and said first laminar filters in that order, and out said output, such that in each set the washing fluid flows first through one filter medium, then through one filter cake and then through one first laminar filter before flowing to said output. **From Claim 14**

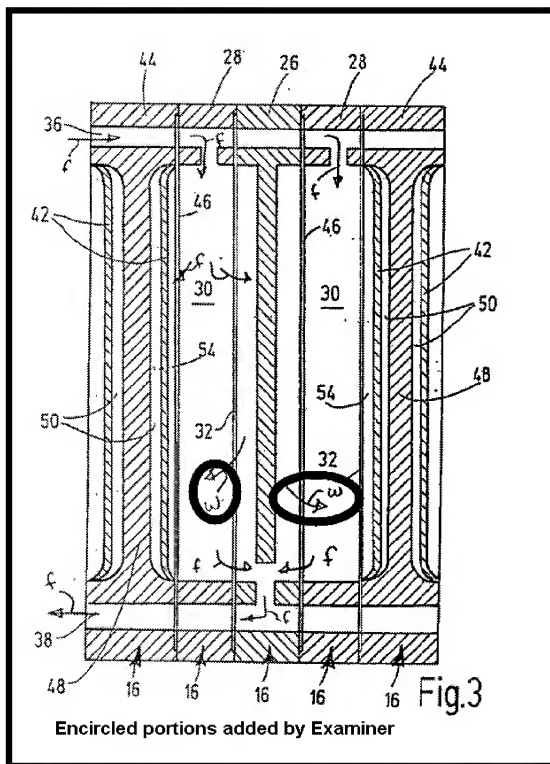
Looking to the replacement drawings submitted on **January 21, 2010**, where labels “**w**” have been added to aid in the understanding of the invention by depicting the “**washing flow**” (Remarks of January 21, 2010; Page 8; lines 8-10), it remains unclear how the wash fluid communicates with the claimed “**output,**” as the arrowhead associated with each added “**w**” ends in a chamber with no apparent outlets at all.

Moreover, it is unclear how the “**washing flow**” emanates from a chamber depicting no inlets.

Independent claim 8 specifies:

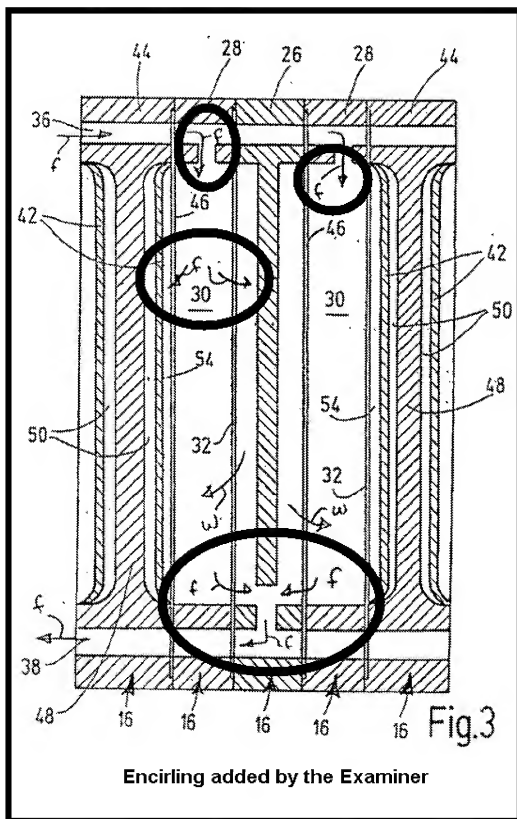
feeding a washing fluid sequentially through each set of the second filter mediums, the filter cakes and the laminar filters in that order such that in each set the washing fluid flows first through one second filter medium, then through one filter cake and then through one first laminar filter; and

It is unclear how this “**sequential**” washing flow takes place. Looking to the replacement drawings submitted on **January 21, 2010**, where labels “**w**” have been added to aid in the understanding of the invention by depicting the “**washing flow**” (Remarks of January 21, 2010; Page 8; lines 8-10), it is not clear that claim 8 even reads on the elected species, that being depicted in Figure 3 and 3a. The “**washing flow**” “**w**” as depicted in Replacement Figure 3 depicts non-sequential split-flow passage across media 32 (laminar filter) and 46 (filter cloth). Beyond that, it is unclear where the “**washing flow**” “**w**” as depicted in Replacement Figure 3 flows. In any event, clearly, the “**washing flow**” “**w**” as depicted in replacement Figure 3 does not show “**feeding a washing fluid sequentially through each set of the second filter mediums, the filter cakes and the laminar filters in that order.**” Following “**w**” to the left, it flows first through a laminar filter 32, and thereafter, to who knows where, but it flows first through a laminar filter. Following “**w**” to the right, it flows first through filter cloth 46, and thereafter, to who knows where, but not “**sequentially through each set of the second filter mediums, the filter cakes and the laminar filters in that order.**”

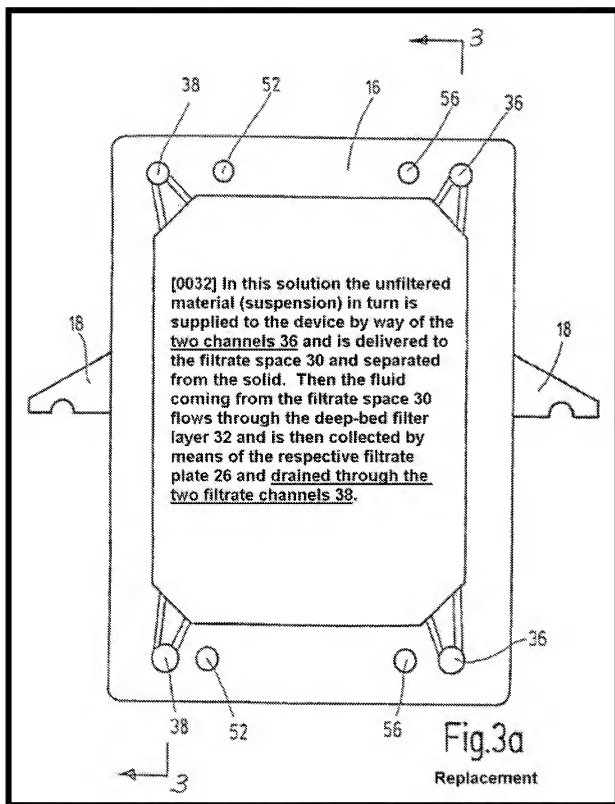


It is noted here that the **“washing flow”** arrows **“w”** depicted in replacement Fig 3 above, appear to be in complete disagreement with what is taught in the specification:

Next the filter cake in the filtrate space 30 in the pressed state is washed, the washing liquid being supplied to the device by way of the other two channels 56 (compare FIG. 3a) for this purpose. This washing liquid is then distributed by way of the free space or the washing chamber 54 between the respective pressing membrane 42 and the filter cloth 45 as another filter medium and is pressed in an equal area through the filter cake in the filtrate space 30. Then the washing liquid passing through the deep-bed filter layer in the form of a laminar filter 32, is collected in the filtrate plate 26 and then drained by way of the filtrate channels 36.



Independent claims **8** and **14**, the only two presently pending independent claims, specify **“discharging filtrate through an output,”** and **“an output for discharging filtrate,”** respectively. It is unclear how filtrate arrives at the **“output.”** Referencing the replacement drawings submitted on **January 21, 2010**, where labels **“f”** have been added to aid in the understanding of the invention by depicting the **“filtering flow”** (Remarks of January 21, 2010; page 8; lines 8-10), it remains unclear how filtrate arrives at the claimed **“output.”** Replacement Fig. 3 depicts nonsequential flow across both filter cloth 46 and laminar filter 32. It is unclear how **“filtering flow”** which passes across filter medium 46 which is adjacent membrane (the third encircled portion from the top of the annotated Fig 3 immediately above) exits pressure chamber 54.



In **claim 8**, the meaning of recitation **"each set of the second filter mediums"** is unclear, as only a single **"second filter medium"** has been previously introduced into the claim. Minimally, this recitation lacks clear positive antecedent basis. Likewise, the recitation **"each set of said second filter mediums"** appearing in independent apparatus **claim 14** suffers from the same malady for the same reasons. Additionally, the recitation **"second filter medium"** appearing in the claims appears to lack clear positive antecedent basis in the claims, as no **"first medium"** was previously, positively introduced. Moreover, the language **"second filter medium"** is found nowhere in the originally filed specification.

With respect to **claim 19**, it is unclear how the recitation, **"said channel means comprise channels extending through said frame parts"** further limits **claim 14** from which it depends. The language of claim 19 is not seen to further limit claim 14, as that which is recited in claim 19 is the only conceivable interpretation of **"channel means."** Accordingly, it is not seen to further limit claim 14. Additionally, it is unclear what Applicant intends by the recitation **"channel,"** as it appears in claim 14, when used in conjunction with **"means."** For those claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure which describe the claimed structure and acts. As evidenced by claim 19, Applicant appears to intend something other than a **"channel,"** in which case, the term **"channel"** is considered misdescriptive. See **MPEP § 2181 - § 2186** for guidance on the drafting of "Means-Plus-Function" limitations.

In claims **20** and **21**, use of the relative and subjective recitation “**fine**” has rendered these claims vague and indefinite because it is subject to numerous possible interpretations. Furthermore, and perhaps more importantly, use of the relative and subjective recitation “**fine**” fails to place potential infringers on notice as to what constitutes infringement because it is subject to numerous possible interpretations.

The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claim **19** is rejected under 35 U.S.C. 112, fourth paragraph, as failing to further limit the subject matter of a previous claim **14**. The recitation, “**said channel means comprise channels extending through said frame parts**” in claim **19** is not seen to further limit claim **14**, as that which is recited in claim **19** is the only conceivable interpretation of “**channel means**.” Accordingly, it is not seen to further limit claim **14**.

United States Patent [19]

Kearney et al.

US005366627A

[11] Patent Number: 5,366,627

[45] Date of Patent: Nov. 22, 1994

[54] ENCLOSED THOROUGH WASH FILTER PRESS

[75] Inventors: William F. Kearney, Kingston;
 George T. Quigley, Cortecoll, both of
 N.Y.

[73] Assignee: Stavo Industries, Inc., Kingston, N.Y.

[21] Appl. No.: 95,800

[22] Filed: Jul. 22, 1993

[51] Int. Cl.: B01D 25/12

[52] U.S. Cl.: 210/224; 210/228;
 210/248; 210/772

[58] Field of Search: 210/225, 230, 236-238,
 210/224, 772, 248, 227, 228; 100/197

[56] References Cited

U.S. PATENT DOCUMENTS

842,484 1/1907 Merrill 210/225
 4,737,285 4/1988 Krullisch et al. 210/230

FOREIGN PATENT DOCUMENTS

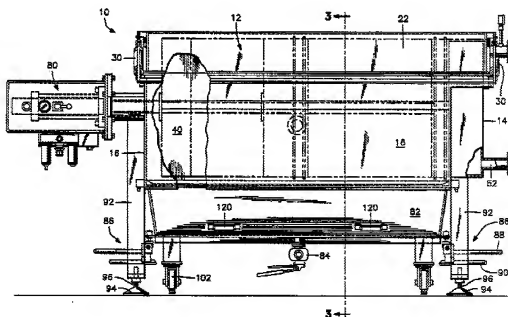
3814397 11/1989 Germany 210/225

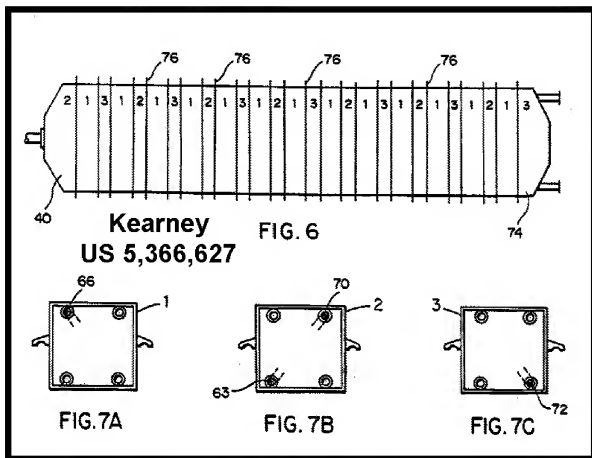
Primary Examiner—Matthew O. Savage
 Attorney, Agent, or Firm—Jacobson, Price, Holman &
 Stern

ABSTRACT

[57] A thorough wash operation of a process fluid is conducted within the confines of an enclosed housing. The housing includes four ports at one side of the housing for transmission of process fluids through a plurality of press frames so as to (1) separate solids from a principal liquid to recover a valuable commodity in the solid cakes formed from the principal liquid, or (2) remove contaminants from the principal liquid so as to recover a cleansed principal liquid, or (3) introduce a valuable commodity into a wash liquid from filter cakes formed from the principal liquid, which valuable commodity may subsequently be removed from the wash liquid. A drip pan is removably secured to a bottom of the housing.

18 Claims, 4 Drawing Sheets





Kearney discloses the use of a plate and frame filtration system employing enclosed through washing means:

US 5,366,627 to Kearney

Column 2

20 SUMMARY OF THE INVENTION

By the present invention, it is now possible to conduct a thorough wash operation of a process fluid within the confines of an enclosed housing. The housing includes four ports at one side of the housing for transmission of process fluids through a plurality of press frames so as to (1) separate solids from a principal liquid to recover a valuable commodity in the solid cakes formed from the principal liquid, or (2) remove contaminants from the principal liquid so as to recover a cleansed principal liquid, or (3) introduce a valuable commodity into a wash liquid from filter cakes formed from the principal liquid, which valuable commodity may subsequently be removed from the wash liquid.

35 Application of this invention is made, for example, to the treatment of volatile components, liquids which are easily vaporized or for high temperature liquid applications. A typical application is in the pharmaceutical industry, where blood fractions need to be separated from a principal liquid.

It would have been obvious to modify the system of **Sebastian** by employing a through washing scheme as taught by **Kearny** in order to recover valuable commodities, such as blood products, as expressly taught by **Kearney** in the passage above.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. This action is **NOT FINAL**.

Response to "Statement of the Substance of the Interview"

Applicant submitted a "**Statement of the Substance of the Interview**" on **December 9, 2010**. It is substantially correct, however, at no time did Mr. Bicks "**point to page 7, lines 15-17.**" During the telephonic interview, no reference to page 7, lines 15-17 of the specification was made.

Drawings

Applicant is reminded of **37 CFR 1.81(a)** and **37 CFR 1.81(d)**

§ 1.81 Drawings required in patent application.

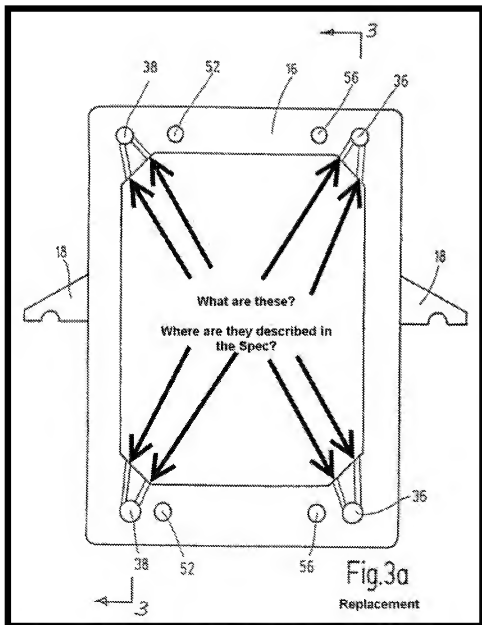
(a) The applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented; this drawing, or a high quality copy thereof, must be filed with the application. Since corrections are the responsibility of the applicant, the original drawing(s) should be retained by the applicant for any necessary future correction.

(d) Drawings submitted after the filing date of the application may not be used to overcome any insufficiency of the specification due to lack of an enabling disclosure or otherwise inadequate disclosure therein, or to supplement the original disclosure thereof for the purpose of interpretation of the scope of any claim.

The drawings are objected to for the reasons set forth below. Corrected drawing sheets in compliance with **37 CFR 1.121(d)** and **37 CFR 1.81(d)** are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

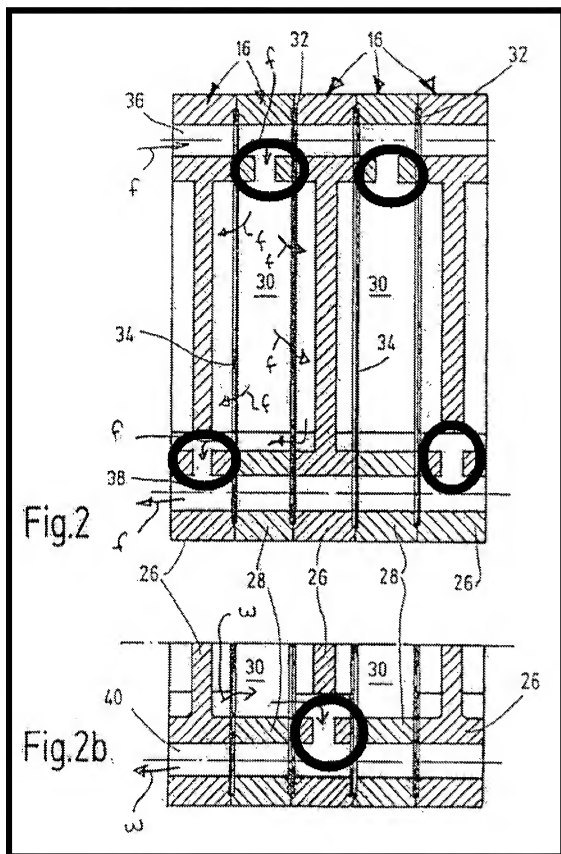
The drawings are objected to because it is **unclear what the unlabeled structure in Fig 3a (elected) et al is, or where it is described in the originally filed specification.** Reference is made to the annotated version of Replacement Fig. 3a below:

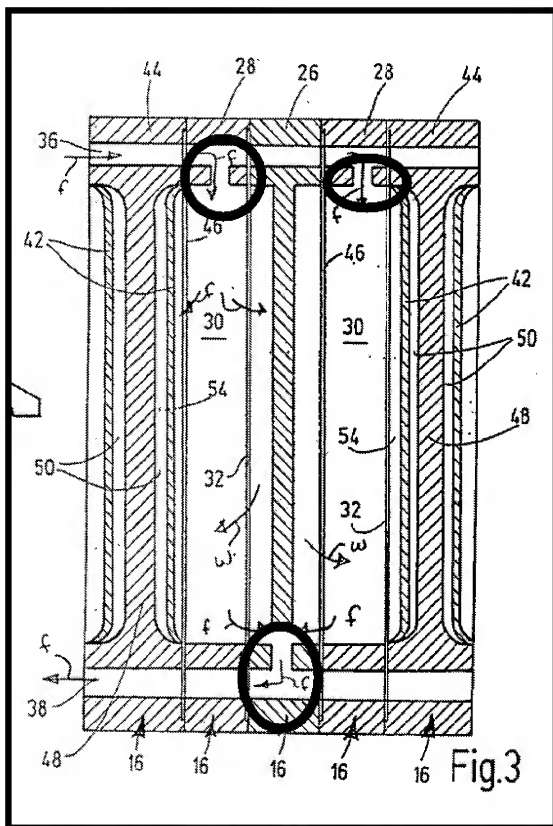


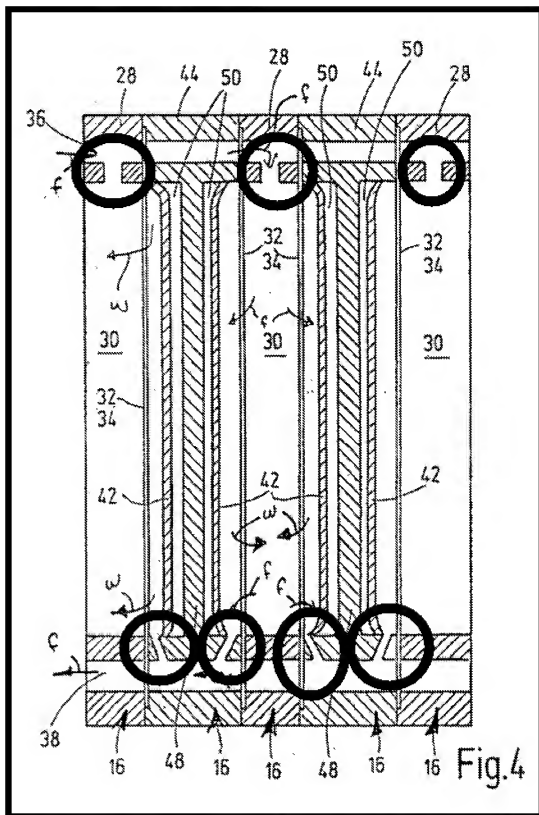
The same questions arise with respect to similar structure in **Fig. 2a** and **Fig. 4a**.

Additionally, it is unclear what specific frame parts "**16**" are identified in each of Figures **2a**, **3a** and **4a**. It is unclear why each of Figures **2a**, **3a** and **4a** contains reference numeral "**16**" without an "**arrowhead**" (see Remarks of 1/21/10 page 8; lines 13-16), especially, since no "**sets**" are depicted in these figures.

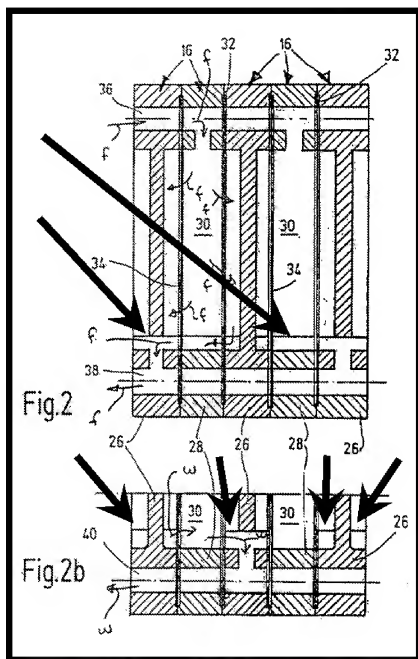
It is unclear what passages are depicted in the following annotated drawings, where they are described in the specification, or why they are unlabeled. They have been encircled to facilitate analysis:



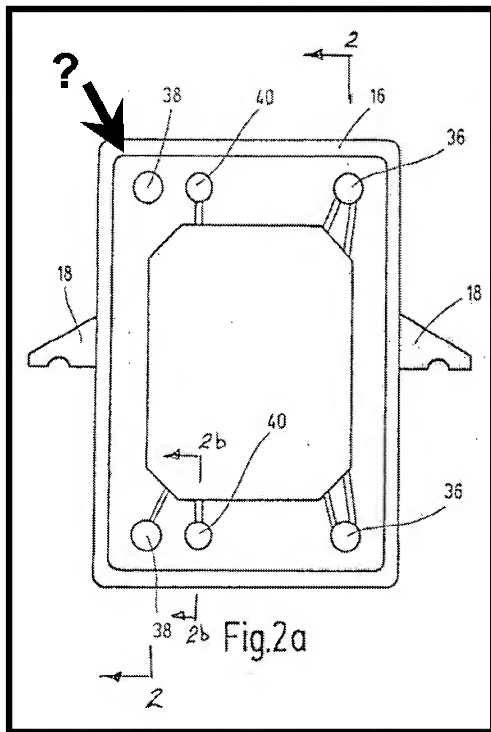




It is unclear what the lines (see annotating arrows) in Replacement Figures 2 and 2b indicate or mean, and, where they are described in the specification. It is unclear why similar lines do not appear in Figures 3 and 4.



It is unclear what the **perimeter line** (see annotated drawing below) in Figure 2a denotes, or why such a line is not present in Figs 3a or 4a?



Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. **Therefore, the "sets" "16" must be shown or the feature(s) canceled from the claim(s). The previously submitted drawings continue to use "16" to identify individual "frame parts.," when brackets or braces should be used to clearly identify what Applicant intends to constitute a "set."** No new matter shall be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference numeral **"45"** as used at paragraph [0032] of the pre-grant publication, does not appear in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they **fail to clearly show the filtering and washing flows as described or suggested in the specification. Additionally, they fail to clearly show the passages that would permit such flows.** Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because **the reference characters identifying various components that have been essentially argued to be the same employ different reference numerals. For example, compare “laminar filters 32” depicted in Fig. 2 with “filter cloth 46” in Fig. 3 corresponding to the elected species. Beyond this numerous other items are used to identify the same (or different?) structures when comparing the various figures.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because **reference character “16” has been used to designate different parts/sets in different figures – compare replacement Fig. 2 with replacement Figs. 3 & 4.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted

after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Comment on Appeal Brief

The "**Summary of the Invention**" in the **Brief** submitted on **October 7, 2010** refers almost exclusively to figures depicting a non-elected species. Any future "**Summary of the Invention**" shall refer to drawings depicting the **elected species**.

Examiner's Comment

All of the remarks/arguments to date have again been reviewed. In reading them, two common themes are evident, the first being **excessive reliance on and reference to a non-elected species**. These two species are not interchangeable, but constitute separate and distinct inventions. One needs only compare species 1 to species 2 to detect **numerous** differences some of which have been elaborated on in various parts of this Office Action. In this regard, the following is observed:

Objections to the Drawings

From Remarks Submitted 1/21/10

The newly submitted drawings add arrows “f” and “w” to show the filtering flow and the washing flow, respectively, as clearly described in the paragraph spanning pages 8-9 of the substitute specification and on page 9 of the originally filed specification. The additions of these arrows are fully supported by the present application, particularly since the original application would be interpreted in this manner by one skilled in this art.

The underscored portions above (annotated by Examiner) reference **non-elected species 1** corresponding to Figures 2, 2a and 2b.

The second theme that is evident is the **unsupported reliance on the skilled artisan in an attempt to make up for deficiencies of the instant disclosure, without evidence or sound scientific reasoning.** For example:

The Examiner questioned how the four ports shown in Figure 1 on mounting plate 10 are coupled to the six channels 38, 40, 36, 38, 40 and 36 shown in Figure 2a by way of example. The **non-elected** undersigned pointed to page 7, lines 15-17, regarding the ports and channels and the fact that the outputs, for example 38 and 40, are connectable to outlet 24 as would be readily recognized by one of ordinary skill in the art.

Remarks of 12/9/10; paragraph bridging pages 1-2

And these frequently expressed opinions have been unsupported by any evidence whatsoever – see **MPEP §§ 716.01(c) II and 2145 I.**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
(Emphasis added by Examiner)

The disclosure submitted to the United States Patent and Trademark Office comes nowhere close to meeting the standard set forth in the first paragraph of 35 U.S.C. 112. If Applicant, after consulting his disclosure, cannot draw arrows depicting the various flows, then, who will be able to understand and practice the invention ***“disclosed”*** in this application?

Any inquiry concerning this communication should be directed to Robert James Popovics at telephone number (571) 272-1164.

/Robert James Popovics/
Primary Examiner
Art Unit 1776